PATENT COOPERATION TREATY

PCT/EP2004/007699

· 2 1 Sep. 2006

From the INTERNATIONAL BUREAU

THE PARTIES OF TRANSMITTAL OF COPIES OF TRANSLATION OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OR CHAPTER II

OF THE PATENT COOPERATION TREATY) (PCT Rules 44bis.3(c) and 72.2)

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Date of mailing (day/month/year) 14 September 2006 (14.09.2006)	
Applicant's or agent's file reference P12249WO	IMPORTANT NOTIFICATION
International application No. PCT/EP2004/007699	International filing date (day/month/year) 13 July 2004 (13.07.2004)
Applicant	M-REAL OYJ et al

1.	Transmittal	of the	translation	to	the	applicant.
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 The International Bureau transmits he patentability (Chapter I).	rewith a copy of the English translation of the international preliminary report on

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected

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Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

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PATENT COOPERATION TREATY

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

P1224		FO	R FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/007699 13.		national filing date (day/month/year)	Priority date (day/month/year) 08.10.2003	
D21H1 Applicant M-REA	9/44, D2	tion (IPC) or national cl	assification and IPC	
2. This	REPORT consis	its of a total of 7	sheets, includi	International Preliminary Examining Authoriting this cover sheet.
a. [companied by ANNEXE	-	
			nternational Bureau) a total of ims and/or drawings which have been ans authorized by this Authority (see Ro	sheets, as follows: amended and are the basis for this report and/o ale 70.16 and Section 607 of the Administrative
ь. [Box.	e International Bureau o	nly) a total of (indicate type and numbe	nsiders contain an amendment that goes beyond in item 4 of Box No. I and the Supplementa or of electronic carrier(s)) _ , containing a sequence listing and/or tables or of the sequence Listing (see
4. Thisr	eport contains in	dications relating to the	following items:	
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Вох №. ПІ	Non-establishment of	opinion with regard to novelty, inventi	ve step and industrial applications.
Box No. IV Lack of unity of invention		.d.;		
	Box No, V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applications and explanations supporting such statement			
	Box No. V	Reasoned statement u citations and explanat	nder Article 35(2) with record to	
	Box No. VI	Reasoned statement u citations and explanat Certain documents cit	nder Article 35(2) with regard to novel- ions supporting such statement	
		Certain documents cit	nder Article 35(2) with regard to novel- tions supporting such statement ed	
	Box No. VI	Certain documents cit Certain defects in the	nder Article 35(2) with regard to novel- ions supporting such statement	
	Box No. VI Box No. VII	Certain documents cit Certain defects in the Certain observations of	nder Article 35(2) with regard to novel- ions supporting such statement ed international application in the international application	ty, inventive step or industrial applicability;
of submissi	Box No. VI Box No. VII Box No. VIII on of the demand	Certain documents cit Certain defects in the Certain observations of	nder Article 35(2) with regard to noveltions supporting such statement ed international application Date of completion of this	ty, inventive step or industrial applicability;
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e of submissi	Box No. VI Box No. VII Box No. VIII on of the demand	Certain documents cit Certain defects in the Certain observations of	nder Article 35(2) with regard to noveltions supporting such statement ed international application Date of completion of this	ty, inventive step or industrial applicability;

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International application No.
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Box No. I	Basis of the report	PC1/EP2004/007699
	Outli of the report	
I. With indic	regard to the language, this report is based on the international application in the lan ated under this item.	guage in which it was filed, unless otherwise
	This report is based on translations from the original language into the following language of a translation furnished for the purposes of:	guage
	international search (Rule 12.3 and 23.1(b))	
İ	publication of the international application (Rule 12.4)	
İ	international preliminary examination (Rule 55.2 and/or 55.3)	
2. With receive this re	regard to the elements of the international application, this report is based on (repla ving Office in response to an invitation under Article 14 are referred to in this repo eport);	cement sheets which have been furnished to the rt as "originally filed" and are not unnexed to
	the international application as originally filed/furnished	
	the description:	
1	pages 1-22	as originally filed/furnished
1	pages* received by this Authori	du a-
1		
⊠ ₁	the claims:	ty on
	nos. 2–21	
		as originally filed/furnished
	as amended (
	ios,* received by this Authorit	ty on
	ios.* received by this Authorit	ty on
ti	he drawings:	· · · · · · · · · · · · · · · · · · ·
sl	heets	as originally filed/furnished
sl	heets* received by this Authorit	
sł	neets* received by this Authorit	y on
a	sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence	
	the amendments have resulted in the cancellation of:	ence Listing.
	the description, pages	
F	the claims, nos.	
Ē		
<u> </u>	the drawings, sheets/figs	
<u></u>	the sequence listing (specify);	
L_ 	any table(s) related to sequence listing (specify):	
The the	is report has been established as if (some of) the amendments annexed to this report by have been considered to go beyond the disclosure as filed, as indicated in the Supp.	rt and listed below had not been made, since
	T as the distribution of the Supply	emental Box (Rule 70.2(c)).
	the description, pages the claims, nos.	
	the drawings, sheets/figs	
	the sequence listing (specify):	
ئىسىا ئىسىدى	any table(s) related to sequence listing (specify):	
y nem 4 e	applies, some or all of those sheets may be marked "superseded."	

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	asoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; ations and explanations supporting such statement	
Statement Novelty (N)		
Hovely (IV)	Claims 2-17, 19	YE
	Craims 1, 10, 20, 21	NO
Inventive step	(IS) Claims	
	Claims 1-21	1E: NO
Industrial app	licability (IA) Claims 1-21	
	Claims	YES
. Citations and exp	anations (Rule 70.7)	NO
1.1 Th	e present report makes reference to the	
fo	llowing documents:	
D1	: US 2001/014381 A1 (SAKAGUCHI HIROSHI ET AL)	
	16 August 2001 (2001-08-16)	
D2		
	30 January 2003 (2003-01-30)	
D3		
	18 September 1996 (1996-09-18)	
D4		
	30 May 2002 (2002-05-30)	
D5:		
	29 May 2003 (2003-05-29)	
D6:		
	23 December 1975 (1975-12-23)	
D7:		
	13 March 1990 (1990-03-13)	
D8:		
	18 December 1996 (1996-12-18)	
D9:		
	JOSEF (DE); ZANDERS FEINPAPIERE AG ()	
	13 February 2003 (2003-02-13).	

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;

- 1.2 The present invention relates to a paper substrate and to a preparation applied to the entire surface of at least one side of thereof, said preparation containing at least one surfactant, a pigment and a binding agent. The particle diameter of the pigment is between 1 and 500 nm. The preparation contains binding agent in a ratio of a maximum of 5 parts per weight of binding agent to 100 parts per weight of pigment (relating in each case to the proportion of solids).
- 1.3 D1 (US-A-2001/0014381) discloses a paper, the paper substrate being coated with SiO₂ particles with a particle diameter of 7 nm (see claims 1 and 9). The coating composition of examples 4 and 10 also has the aforementioned pigment in combination with a surfactant (see also paragraphs (0118) and (0119)). Furthermore, D1 also discloses that the paper is highly suitable for ink-jet printing. Thus, the subject matter of the current claims 1, 18, 20 and 21 is not novel over the disclosure of D1 (PCT Article 33(2)).
- 1.4 D2 (US-A-2003/0022970) also discloses a coated paper, the coating composition according to said document containing a surfactant and a pigment (see claims 1, 6, 9, 10 and 18). The particle size of the pigment used should be between 150 and 400 nm (see paragraph (0029)). The present claims 1 and 18 consequently fail to satisfy the requirements of PCT Article 33(2).

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- D4 (US-A-2002/0064633) concerns an ink-jet 1.5 printing paper which has a coating with fine particles of pigment and a binding agent, namely a SiO_2 with a particle size of 20 nm (see claims 1-20). D7 also indicates that a surfactant can be added to the coating composition (see paragraph (0017)). Proceeding from D4, a person skilled in the art would derive from D7 (US-4 908240) that the presence of a surfactant in the coating composition improves the printing properties of the paper. It therefore appears that D4 and D7, in combination, would lead a person skilled in the art to the subject matter of claims 1, 18, 20 and 21. Thus, the subject matter of claims 1, 18, 20 and 21 is not inventive relative to the disclosures of D4 and D7 (EPC 56).
- 1.6 The disclosure of the following documents,
 D3 (EP-A-0 732 219, see claims 1-62),
 D8 (GB-A-2 301 785, see claims 1-10),
 D5 (US-A-2003/099816, see claims 1-32) and
 D7 (US-A-3 928 707, see claims 1-12), is similar to that of the aforementioned documents, D4 and D7, and said documents can therefore also be combined with one another.
- 1.7 The features of claims 2 to 9 and 13 to 17 are also known from D1, D2, D3, D4, D5, D6, D7 and/or D8 (see the above references to said documents, EPC Articles 54 and 56). The subject matter of

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INTERNATIONAL PRELIMINARY

International application No.

	ANATIONAL PRELIMINARY REPORT ON PATENTABILITY	application (40,			
Box No. V	<u> </u>	PCT/EP2004/007699			
	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	alaima 10				
	claims 10 and 11, likewise, does no	ot at present			
	appear to be inventive relative to	±1.			
	ofonement's service to	cne			
	aforementioned documents (EPC Artic	cle 56).			
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

2.1 D1, D2, D3, D4, D5, D6, D7 and/or D8 should be acknowledged in the description as the closest prior art (PCT Rule 5.1(a)(i) to (vi)).